

IN THE CLAIMS:

1-28. (cancelled)

29. (new) A method for outputting data of a diagnosis data stream of a printer or copier, the diagnosis data stream comprising first data of a first data type and at least second data of a second data type, the first data and the second data each including structure data and use data corresponding to the respective data type, comprising the steps of:

supplying the diagnosis data stream to an evaluation program of an evaluation unit for evaluating the first and the second data;

10 analyzing the structure data of the first data with aid of the evaluation program, a first identification which is characteristic of the first data type being determined;

upon the determination of the first identification, selecting a first evaluation instruction from a plurality of evaluation instructions with aid of the evaluation program and loading it, the use data of the first data being evaluated with aid of the first evaluation instruction;

15 verifying with aid of the evaluation program whether the evaluated first data include further data areas comprising the second data which can be evaluated with aid of a further second evaluation instruction which can be selected from the plurality of evaluation instructions;

20 analyzing the second data with aid of the evaluation program, a second identification which is characteristic of the second data type being determined; and

upon the determination of the second identification, selecting said second evaluation instruction from said plurality of evaluation instructions with aid of the evaluation program and loading it, the second data being evaluated and output with aid of the second evaluation instruction.

30. (new) A method according to claim 29 wherein with aid of the first evaluation instruction the use data of the first data are evaluated and output.

5 31. (new) A method according to claim 29 wherein the first and/or second data each include encoded information.

32. (new) A method according to claim 31 wherein each piece of encoded information is decoded with aid of the selected evaluation instruction.

10 33. (new) A method according to claim 29 wherein the information content of one data element of the first and/or second data is determined with aid of the selected evaluation instruction by a position of the data element in a data sequence of the first or second diagnosis data.

34. (new) A method according to claim 29 wherein the data type relates to an order of the information, an identification of the information, and/or a coding of the information.

15 35. (new) A method according to claim 29 wherein the first and/or second data are binary data, numerical data, alphanumeric data and/or image data.

20 36. (new) A method according to claim 29 wherein the first and/or second data include time information, error codes, measuring values, setting values, operating state information, status information, input parameters and/or output parameters.

37. (new) A method according to claim 29 wherein the first data and the second data include similar information, which is included in the first and the second data in different order and/or with different coding.

25 38. (new) A method according to claim 29 wherein the first data are different from the second data.

39. (new) A method according to claim 29 wherein the first and/or the second data are sorted, converted and/or commented with aid of the respective evaluation instruction before they are displayed.

5 40. (new) A method according to claim 29 wherein the first data are generated by a first control unit, the second data are generated by a second control unit, and the control units control several parallel processes.

10 41. (new) A method according to claim 39 wherein the first and/or second control unit is an input and/or output control unit, a print data processing unit, an interface control unit, an operating unit, a main control unit and/or a sub-module control unit.

42. (new) A method according to claim 29 wherein at least a part of the first and/or the second data is generated upon occurrence of preset diagnosis events, when at least one of the control units determines one or several of the following events:

15 occurrence of errors;
occurrence of operating events;
processing of print data;
preset memory states; and/or
amendment of software versions.

20 43. (new) A method according to claim 29 wherein the first and/or the second data include print data and data comprising operating state information.

25 44. (new) A method according to claim 29 wherein the diagnosis data stream is analyzed and interpreted with aid of a data processing unit and the processed first and/or the second data are displayed in a preset format.

45. (new) A method according to claim 29 wherein the diagnosis data stream is searched for preset data sequences with aid of the first evaluation instruction, and dependent on the determined data sequence, a second evaluation instruction is selected, the further data assigned to said
5 preset data sequence in the diagnosis data stream being processed with aid of the second evaluation instruction.

46. (new) A method according to claim 45 wherein the preset data sequence includes key data, which indicate whether the data assigned to said key data are first data or second data.

10 47. (new) A method according to claim 29 wherein the diagnosis data stream is included in a data file, the data file being supplied to an evaluation unit.

48. (new) A method according to claim 47 wherein a further evaluation instruction is selected and loaded by the data processing unit
15 dependent on extension of a data file name, with aid of said further evaluation instruction the first data and the second data being determined in the diagnosis data stream and are then further processed with aid of the first and/or the second evaluation instruction.

49. (new) A method according to claim 29 wherein the evaluation
20 instructions are each stored in a separate data file, and with aid of an evaluation unit the first evaluation instruction for processing the first diagnosis data and the second evaluation instruction for processing the second diagnosis data are loaded into a main memory of said evaluation unit.

50. (new) A method according to claim 29 wherein dependent on
25 the selection of the evaluation instruction and/or information included in the evaluation instruction an appropriate display format is selected, with which processed diagnosis data are output with aid of an output unit.

51. (new) A method according to claim 29 wherein the first and the second data both have a different data structure and/or a different data format.

5 52. (new) A method according to claim 29 wherein assignment of the first data included in the diagnosis data stream to the first evaluation instruction is made with aid of a unique first key included in the diagnosis data stream and of the second data included in the diagnosis data stream to the second evaluation instruction is made with aid of a unique second key included in the diagnosis data stream, and with aid of the keys the data
10 assigned to the respective key being identified as the first data or as the second data and being recognized as the first data or as the second data with aid of these keys.

53. (new) A method according to claim 29 wherein the diagnosis data stream comprising the first data and the second data is generated with
15 aid of a control unit, and with aid of said control unit a first key being assigned to the first diagnosis data and a second key being assigned to the second diagnosis data.

54. (new) A method according to claim 53 wherein a data amount information is stored in a predetermined distance to the key as a length
20 information which indicates a storage amount of the respective diagnosis data in the diagnosis data stream.

55. (new) A device for outputting data of a diagnosis data stream on a printer or copier, comprising:

an evaluation unit which processes a diagnosis data stream comprising
25 first data of a first data type and comprising at least second data of a second data type, the first data and the second data each including structure data and use data corresponding to the respective data type;

the evaluation unit executing an evaluation program for evaluating and outputting the first and the second data supplied with aid of the diagnosis data stream;

5 the evaluation unit analyzing the structure data of the first and the second data with aid of the evaluation program, the evaluation unit determining a first identification which is characteristic of the first data type;

10 the evaluation unit selecting and loading a first evaluation instruction from a plurality of evaluation instructions with aid of the evaluation program upon determination of the first identification, the evaluation unit evaluating the use data of the first data with aid of said loaded evaluation instruction;

the evaluation unit verifying with aid of the evaluation program whether the evaluated first data include further data areas comprising the second data which can be evaluated with aid of a further second evaluation instruction;

15 the evaluation unit analyzing the second data with aid of the evaluation program and determining a second identification which is characteristic of the second data type; and

20 the evaluation unit selecting and loading a second evaluation instruction from the plurality of evaluation instructions with aid of the evaluation program upon determination of the second identification, the evaluation unit evaluating and outputting the use data of the second data with aid of the selected evaluation instruction.

56. (new) A device according to claim 55 wherein the evaluation unit evaluates and outputs the use data of the first data with aid of the loaded first evaluation instruction.